



Government
of Canada

Gouvernement
du Canada

Power Outages

What to do?



Know the risks



Make a plan



Get a kit



Canada

IS YOUR FAMILY
PREPARED?

OUR PARTNERS

This publication was produced by Public Safety Canada in collaboration with: Canada Mortgage and Housing Corporation (CMHC), The Canadian Red Cross, and St. John Ambulance.

Scan this code with your mobile device to visit
www.GetPrepared.ca.



This publication is also available in multiple formats (audio, braille, large print, and e-Text). To order, please call: 1 800 O-Canada (1-800-622-6232); TTY: 1-800-926-9105.

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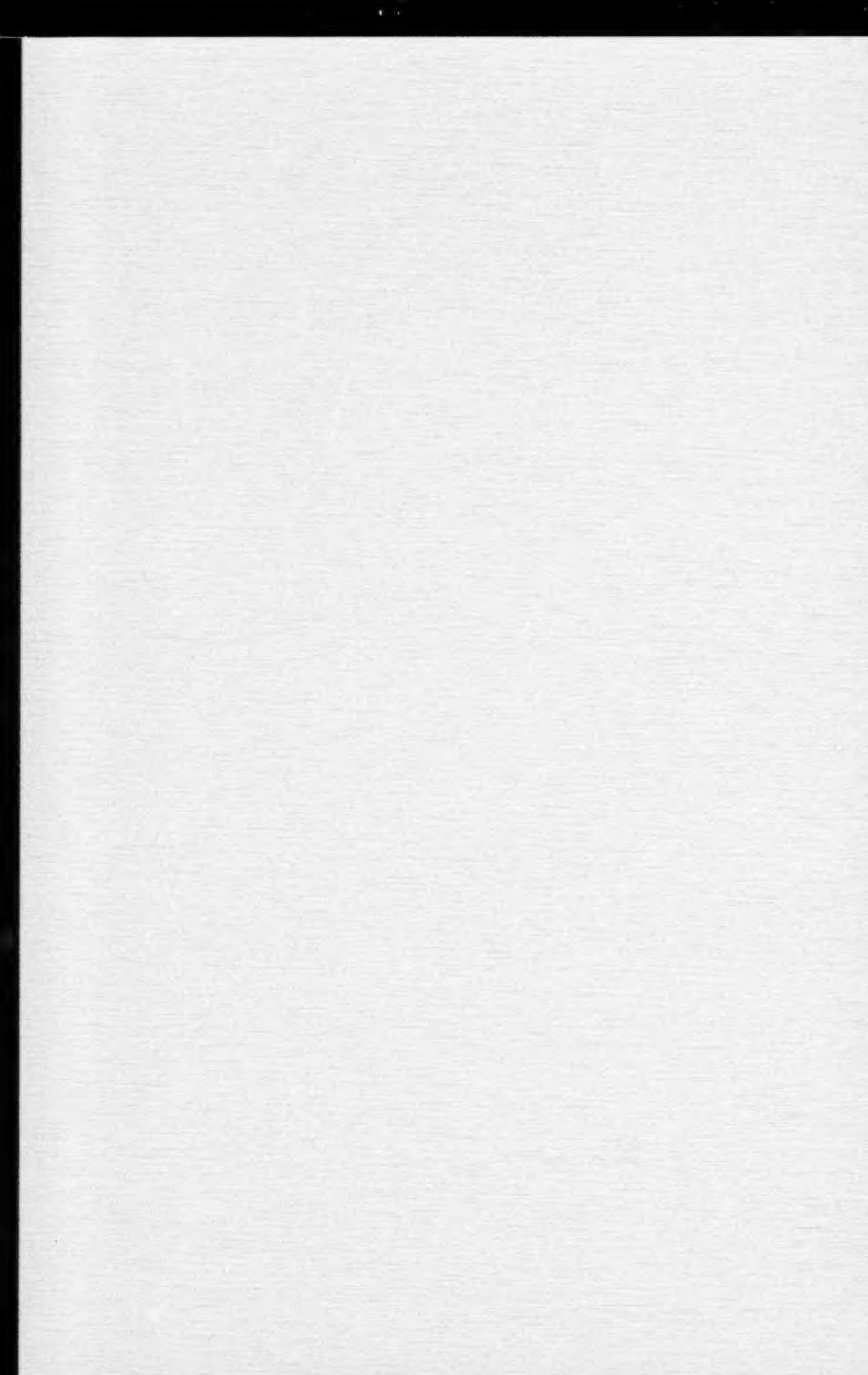
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INTRODUCTION

Most power outages will be over almost as soon as they begin, but some can last much longer — up to days or even weeks. Power outages are often caused by freezing rain, sleet storms and/or high winds which damage power lines and equipment. Cold snaps or heat waves can also overload the electric power system.

During a power outage, you may be left without heating/air conditioning, lighting, hot water, or even running water. If you only have a cordless phone, you will also be left without phone service. If you do not have a battery-powered or crank radio, you may have no way of monitoring news broadcasts. In other words, you could be facing major challenges. Everyone has a responsibility to protect their homes and their families.

You can greatly lessen the impact of a power outage by taking the time to prepare in advance. This involves three basic steps:

1. Find out what to do before, during, and after a power outage.
2. Make a family emergency **plan**, so that everyone knows what to do, and where to go in case of an emergency.
3. Get an emergency **kit**, so that you and your family can be self-sufficient for at least 72 hours during a power outage.

Planning for a power outage will also help prepare you for other types of emergencies. After reading this guide, keep it in a handy spot, such as in your emergency kit.

STEP 1: KNOW THE RISKS AND GET PREPARED

To get prepared for a power outage, you should know the risks specific to your community and your region to help you better prepare. To find out what the hazards are in your region, visit the "Know the risks" section of the GetPrepared.ca website.

Preparing Your Home

- You can install a non-electric standby stove or heater. Choose heating units that are not dependent on an electric motor, electric fan, or some other electric device to function. It is important to adequately vent the stove or heater with the type of chimney flue specified for it. Never connect two heating units to the same chimney flue at the same time.
- If you have a wood-burning fireplace, have the chimney cleaned every fall in preparation for use and to eliminate creosote build-up which could ignite and cause a chimney fire.
- If the standby heating unit will use the normal house oil or gas supply, have it connected with shut-off valves by a certified tradesperson.
- Before considering the use of an emergency generator during a power outage, check with furnace, appliance and lighting fixture dealers or manufacturers regarding power requirements and proper operating procedures.

People with disabilities or others requiring assistance

Consider how you may be affected in a power outage, including:

- Your evacuation route — without elevator service (if applicable).

- Planning for a backup power supply for essential medical equipment.
- Keeping a flashlight and a cell phone handy to signal for help.
- Establishing a self-help network to assist and check on you during an emergency.
- Enrolling in a medical alert program that will signal for help if you are immobilized.
- Keeping a list of facilities that provide life-sustaining equipment or treatment.
- Keeping a list of medical conditions and treatment.
- If you live in an apartment, advise the property management that you may need assistance staying in your apartment or that you must be evacuated if there is a power outage. This will allow the property manager to plan and make the necessary arrangements on your behalf.

During a Power Outage

- First, check whether the power outage is limited to your home. If your neighbours' power is still on, check your own circuit breaker panel or fuse box. If the problem is not a breaker or a fuse, check the service wires leading to the house. If they are obviously damaged or on the ground, stay at least 10 metres back and notify your electric supply authority. Keep the number along with other emergency numbers near your telephone.
- If your neighbours' power is also out, notify your electric supply authority.
- Turn off all tools, appliances and electronic equipment, and turn the thermostat(s) for the home heating system down to minimum to prevent damage from a power surge when power is restored. Also, power can be restored more easily when there is not a heavy load on the electrical system.

- Turn off all lights, except one inside and one outside, so that both you and hydro crews outside know that power has been restored.
- Don't open your freezer or fridge unless it is absolutely necessary. A full freezer will keep food frozen for 24 to 36 hours if the door remains closed.
- Never use charcoal or gas barbecues, camping heating equipment, or home generators indoors. They give off carbon monoxide. Because you can't smell or see it, carbon monoxide can cause health problems and is life-threatening.
- Use proper candle holders. Never leave lit candles unattended and keep out of reach of children. Always extinguish candles before going to bed.
- Listen to your battery-powered or crank radio for information on the outage and advice from authorities.
- Make sure your home has a working carbon monoxide detector. If it is hard-wired to the house's electrical supply, ensure it has a battery-powered back-up.
- Protect sensitive electrical appliances such as TVs, computers, and DVD players with a surge-protecting power bar.

Use of home generators

Home generators are handy for backup electricity in case of an outage, but must only be used in accordance with the manufacturer's guidelines. A back-up generator may only be connected to your home's electrical system through an approved transfer panel and switch that has been installed by a qualified electrician. Never plug a generator into a wall outlet as serious injury can result when the current produced by the home generator is fed back into the electrical lines, and transformed to a higher voltage. This can endanger the lives of utility employees working to restore the power.

To operate a generator safely:

- Follow the manufacturer's instructions.
- Ensure that the generator operates outdoors in well-ventilated conditions, well away from doors or windows, to prevent exhaust gases from entering the house.
- Connect lights and appliances directly to the generator. If extension cords must be used, ensure they are properly rated, CSA-approved cords.

If you have to evacuate

Evacuation is more likely during winter months, when plummeting temperatures can make a house uninhabitable. Although a house can be damaged by low temperatures, the major threat is to the plumbing system. If a standby heating system is used, check to see that no part of the plumbing system can freeze.

If the house must be evacuated, protect it by taking the following precautions:

- Turn off the main breaker or switch of the circuit-breaker panel or power-supply box.
- Turn off the water main where it enters the house. Protect the valve, inlet pipe, and meter or pump with blankets or insulation material.
- Drain the water from your plumbing system. Starting at the top of the house, open all taps, and flush toilets several times. Go to the basement and open the drain valve. Drain your hot water tank by attaching a hose to the tank drain valve and running it to the basement floor drain.
- **Note:** If you drain a gas-fired water tank, the pilot light should be turned out — call the local gas supplier to re-light it.
- Unhook washing machine hoses and drain.



- Do not worry about small amounts of water trapped in horizontal pipes. Add a small amount of glycol or antifreeze to water left in the toilet bowl, and the sink and bathtub traps.
- If your house is protected from groundwater by a sump pump, clear valuables from the basement floor in case of flooding.

After the Power Returns

- Do not enter a flooded basement unless you are sure the power is disconnected.
- Do not use flooded appliances, electrical outlets, switch boxes or fuse-breaker panels until they have been checked and cleaned by a qualified electrician.
- Replace the furnace flue (if removed) and turn off the fuel to the standby heating unit.
- Switch on the main electric switch (before, check to ensure appliances, electric heaters, TVs, microwaves, computers, etc. were unplugged to prevent damage from a power surge).
- Give the electrical system a chance to stabilize before reconnecting tools and appliances. Turn the heating-system thermostats up first, followed in a couple of minutes by reconnection of the fridge and freezer. Wait 10 to 15 minutes before reconnecting all other tools and appliances.
- Close the drain valve in the basement.
- Turn on the water supply. Close lowest valves/taps first and allow air to escape from upper taps.
- Make sure that the hot water heater is filled before turning on the power to it.
- Check food supplies in refrigerators, freezers and cupboards for signs of spoilage. If a freezer door has been kept closed, food should stay frozen 24 to 36 hours, depending on the temperature. When food begins to defrost (usually after two days), it should be cooked; otherwise it should be thrown out or composted.

- As a general precaution, keep a bag of ice cubes in the freezer. If you return home after a period of absence and the ice has melted and refrozen, there is a good chance that the food is spoiled. When in doubt, throw it out!
- Reset your clocks, automatic timers, and alarms.
- Restock your emergency kit so the supplies will be there when needed again.



STEP 2: MAKE AN EMERGENCY PLAN

Every Canadian household needs an emergency plan. It will help you and your family to know what to do in case of an emergency. Remember, your family may not be together when the power goes out.

Start by discussing what could happen and what you should do at home, at school or at work if an emergency happens. To be prepared, make a list of what needs to be done ahead of time. Store important family documents, such as birth certificates, passports, wills, financial documents, insurance policies, etc. in waterproof container(s). Identify an appropriate out-of-town contact that can act as a central point of contact in an emergency.

Write down and exercise your plan with the entire family at least once a year. Make sure everybody has a copy and keeps it close at hand.

For more information on making an emergency plan, call 1 800 O-Canada or visit **www.GetPrepared.ca** to download or complete an emergency plan online.



STEP 3: GET AN EMERGENCY KIT

*In an emergency you will need some basic supplies.
You may need to get by without power or tap water.
Be prepared to be self-sufficient for at least 72 hours.*

You may have some of the items already, such as a flashlight, battery-operated radio, food and water. The key is to make sure they are organized and easy to find. Would you be able to find your flashlight in the dark?

Make sure your kit is easy to carry. Keep it in a backpack, duffel bag or suitcase with wheels, in an easy-to-reach, accessible place, such as your front hall closet. Make sure everyone in the household knows where the emergency kit is.

Basic emergency kit

- Water — at least two litres of water per person per day. Include small bottles that can be carried easily in case of an evacuation order.
- Food that won't spoil, such as canned food, energy bars and dried foods (remember to replace the food and water once a year).
- Manual can opener.
- Wind-up or battery-powered flashlight (and extra batteries).
- Wind-up or battery-powered radio (and extra batteries).
- First aid kit.
- Special items such as prescription medications, infant formula and equipment for people with disabilities.
- Extra keys to your car and house.



- Cash in smaller bills, such as \$10 bills and change for payphones.
- A copy of your emergency plan and contact information.

Tip: You may want to ensure you have a land-line and corded phone in your home, as most cordless phones will not work during a power outage.

Recommended additional items

- Candles and matches or lighter (do not leave candles unattended. Place candles in sturdy containers and put them out before going to sleep).
- A change of clothing and footwear for each household member.
- Sleeping bag or warm blanket for each household member.
- A whistle (in case you need to attract attention).
- Garbage bags for personal sanitation.
- Toilet paper and other personal care supplies.
- Safety gloves.
- Basic tools (hammer, pliers, wrench, screwdrivers, fasteners, safety gloves).
- Small fuel-driven stove and fuel (follow manufacturer's directions and store properly).
- Two extra litres of water per person per day for cooking and cleaning.

You can also purchase a pre-packaged emergency kit from the Canadian Red Cross at **www.redcross.ca**.

RESOURCES

National Resources

Public Safety Canada — Other publications:

- Earthquakes — What to do?
- Emergency Preparedness for Farm Animals
- Floods — What to do?
- Severe Storms — What to do?
- Your Emergency Preparedness Guide
- Emergency Preparedness Guide for People with Disabilities/
Special Needs

For more emergency preparedness information or to order brochures, visit **www.GetPrepared.ca** or follow **@Get_Prepared** on Twitter.

Canada Mortgage and Housing Corporation —
1-800-668-2642 or visit **www.cmhc.gc.ca**

Canadian Red Cross — **www.redcross.ca**

St. John Ambulance — **www.sja.ca**

Provincial and Territorial Resources

For regional or local information on emergency preparedness, contact your emergency management organization as follows:

Alberta

Alberta Emergency Management Agency
Telephone: (780) 422-9000/Toll-free: 310-0000
www.aema.alberta.ca

British Columbia

British Columbia Provincial Emergency Program

Telephone: (250) 952-4913/Emergency toll-free: 1-800-663-3456

www.pep.bc.ca

Manitoba

Manitoba Emergency Measures Organization

Telephone: (204) 945-4772/Toll-free: 1-888-267-8298

www.manitobaemo.ca

New Brunswick

New Brunswick Emergency Measures Organization

Telephone: (506) 453-2133/Toll-free 24-Hour line: 1-800-561-4034

www.gnb.ca/cnb/emo-omu

Newfoundland and Labrador

Newfoundland and Labrador Fire and Emergency Services

Telephone: (709) 729-3703

www.ma.gov.nl.ca/ma/fes

Northwest Territories

Northwest Territories Emergency Measures Organization

Telephone: (867) 873-7538/24-Hour line: (867) 920-2303

www.maca.gov.nt.ca/emergency_management/index.htm

Nova Scotia

Nova Scotia Emergency Management Office

Toll-free 24-Hour line: 1-866-424-5620

www.gov.ns.ca/emo

Nunavut

Nunavut Emergency Management

Telephone: (867) 975-5403/Toll-free 24-Hour line: 1-800-693-1666
cgs.gov.nu.ca/en/nunavut-emergency-management

Ontario

Emergency Management Ontario

Telephone: (416) 314-3723/Toll-free 24-Hour line: 1-877-314-3723
www.ontario.ca/emo

Prince Edward Island

Prince Edward Island Emergency Measures Organization

Telephone: (902) 894-0385/After hours: (902) 892-9365
www.peipublicsafety.ca

Quebec

Quebec — Ministère de la sécurité publique

Telephone (toll-free): 1-866-644-6826
General information (Services Québec): 1-877-644-4545
www.securitepublique.gouv.qc.ca

Saskatchewan

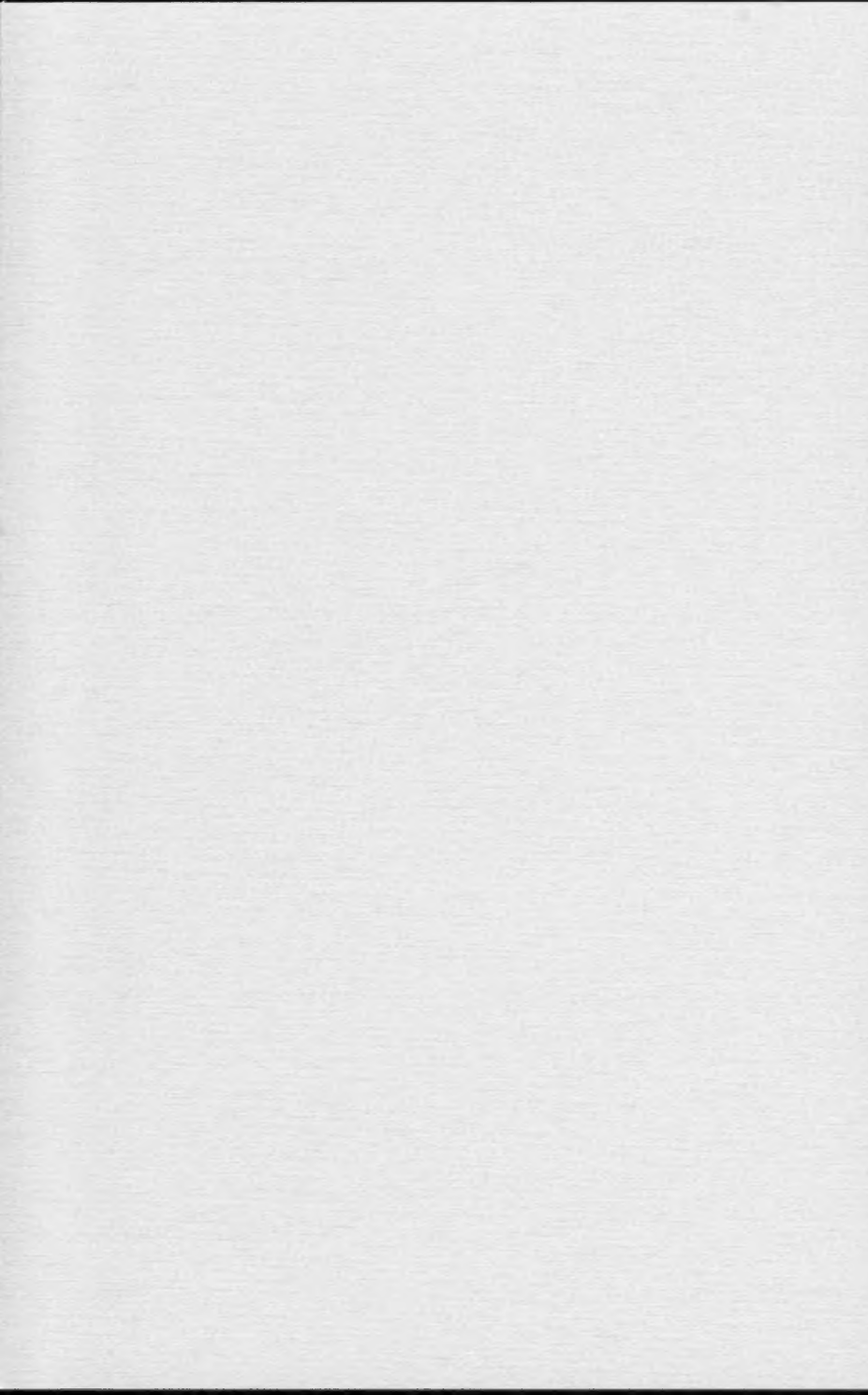
Saskatchewan Emergency Management Organization

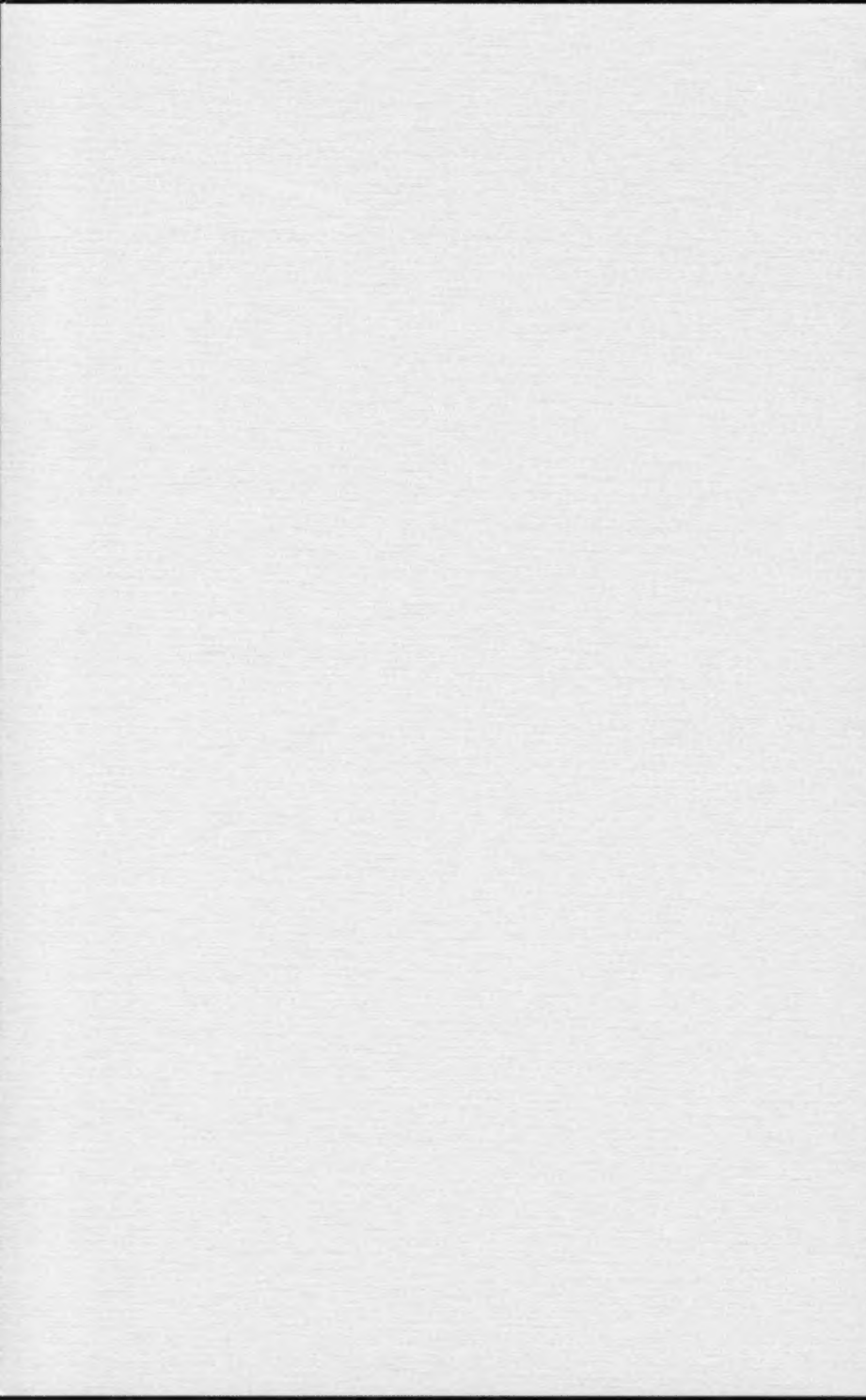
Telephone: (306) 787-9563
www.cps.gov.sk.ca/SaskEMO

Yukon

Yukon Emergency Measures Organization

Telephone: (867) 667-5220
Toll-free (within the Yukon): 1-800-661-0408
www.community.gov.yk.ca/emo







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www.GetPrepared.ca